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FISH & RICHARDSON P.C.

002

Sheet 1 of 10

FORM PTO-1449 (Modified)

ATTY. DOCKET NO.  
24601-418C

SERIAL NO.  
10/086,745

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

APPLICANT  
De Jong *et al.*

FILING DATE  
February 28, 2002

GROUP  
1636

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	Ref. No.	DOCUMENT NUMBER								DATE	NAME	CLASS	SUB CLASS	FILING DATE
<del>.</del>	<del>A</del>	<del>4</del>	<del>8</del>	<del>8</del>	<del>7</del>	<del>3</del>	<del>5</del>	<del>5</del>	<del>5</del>	<del>01/30/90</del>	<del>Eppstein <i>et al.</i></del>	<del>438</del>	<del>240.2</del>	<del>10/29/87</del>
<del>.</del>	<del>B</del>	<del>4</del>	<del>9</del>	<del>3</del>	<del>7</del>	<del>1</del>	<del>9</del>	<del>0</del>	<del>0</del>	<del>08/26/90</del>	<del>Palmenberg <i>et al.</i></del>	<del>435</del>	<del>69.1</del>	<del>10/15/87</del>
<del>.</del>	<del>C</del>	<del>5</del>	<del>2</del>	<del>0</del>	<del>8</del>	<del>0</del>	<del>5</del>	<del>6</del>	<del>6</del>	<del>05/04/93</del>	<del>Fujisaki <i>et al.</i></del>	<del>427</del>	<del>96</del>	<del>04/30/92</del>
<del>.</del>	<del>D</del>	<del>5</del>	<del>2</del>	<del>8</del>	<del>8</del>	<del>6</del>	<del>2</del>	<del>5</del>	<del>5</del>	<del>02/22/94</del>	<del>Hadlaczky</del>	<del>435</del>	<del>172.2</del>	<del>09/19/91</del>
<del>.</del>	<del>E</del>	<del>5</del>	<del>3</del>	<del>1</del>	<del>8</del>	<del>6</del>	<del>1</del>	<del>5</del>	<del>5</del>	<del>08/07/94</del>	<del>Wyk</del>	<del>604</del>	<del>30</del>	<del>08/17/92</del>
<del>.</del>	<del>F</del>	<del>5</del>	<del>3</del>	<del>3</del>	<del>4</del>	<del>7</del>	<del>6</del>	<del>1</del>	<del>1</del>	<del>08/02/94</del>	<del>Gebeyehu <i>et al.</i></del>	<del>664</del>	<del>197</del>	<del>08/28/92</del>
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<del>.</del>	<del>W</del>	<del>5</del>	<del>9</del>	<del>6</del>	<del>2</del>	<del>2</del>	<del>6</del>	<del>5</del>	<del>5</del>	<del>10/05/99</del>	<del>Norris <i>et al.</i></del>	<del>435</del>	<del>69.1</del>	<del>12/15/98</del>

Duplicates

EXAMINER

David Lambertson

DATE CONSIDERED

6/17/04

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Title: METHODS FOR DELIVERING NUCLEIC ACID MOLECULES INTO CELLS AND ASSESSMENT THEREOF

Sheet 2 of 10

FORM PTO-1449 (Modified)

ATTY. DOCKET NO.  
24601-416CSERIAL NO.  
10/086,745LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENTAPPLICANT  
De Jong *et al.*FILING DATE  
February 28, 2002GROUP  
1636

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	Ref. No.	DOCUMENT NUMBER							DATE	NAME	CLASS	SUB CLASS	FILING DATE
X	Y	5	9	6	5	3	9	6	10/12/99	Pen <i>et al.</i>	435	69.1	01/13/98
.	Y	5	9	7	6	7	9	6	11/02/99	Szalay <i>et al.</i>	435	6	12/23/98
.	Z	5	9	7	6	8	4	9	11/02/99	Hustad <i>et al.</i>	435	183	04/30/98
.	AA	5	9	8	5	5	7	7	11/16/99	Bullinski	435	6	10/14/98
.	AB	5	9	9	3	4	3	4	11/30/99	Deo <i>et al.</i>	604	501	09/29/98
.	AC	6	0	2	5	1	5	5	02/15/00	Hadlaczky <i>et al.</i>	435	69.1	08/03/96
.	AD	6	0	2	7	5	8	8	02/22/00	Hofmann <i>et al.</i>	604	522	06/03/98
.	AE	6	0	3	4	2	2	8	03/07/00	Norris <i>et al.</i>	538	23.1	06/25/99
.	AF	6	0	3	7	1	3	3	03/14/00	Li	435	7.2	04/17/98
.	AG	6	0	5	1	4	2	9	04/18/00	Hawley-Nelson <i>et al.</i>	435	458	03/14/97
.	AH	6	0	5	4	3	1	2	04/25/00	Larocca <i>et al.</i>	435	320.1	08/29/97
.	AI	6	0	7	4	6	6	7	06/13/00	Kinnunen <i>et al.</i>	424	450	05/21/98
.	AJ	6	0	7	7	6	8	7	06/20/00	Hadlaczky <i>et al.</i>	435	172.3	07/15/96
.	AK	6	1	5	4	0	3	7	02/06/01	Rolland <i>et al.</i>	435	455	05/02/97

Duplicates

## FOREIGN PATENT DOCUMENTS

*Ref No.	DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUB CLASS	Translation Yes No
AL	0	0	2	7	7	8	5	05/18/00	PCT			
AM	0	0	5	2	1	8	6	09/08/00	PCT			
AN	0	7	5	5	9	2	4	01/29/97	EP A1			
AQ	0	7	5	5	9	2	4	06/09/99	EP B1			
AP	9	7	4	0	1	8	3	10/30/97	PCT			
AQ	9	8	0	8	8	6	4	03/05/99	PCT			
AR	9	8	2	1	5	8	4	05/06/99	PCT			

Duplicates

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Title: METHODS FOR DELIVERING NUCLEIC ACID MOLECULES INTO CELLS AND ASSESSMENT THEREOF

Sheet 3 of 10

FORM PTO-1449 (Modified)	ATTY. DOCKET NO. 24601-418C	SERIAL NO. 10/086,745
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT De Jong <i>et al.</i>	
	FILING DATE February 28, 2002	GROUP 1636

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

DS	AS	1999 Press Release, "Chromos Molecular Systems Demonstrates Large-Scale Isolation of Mammalian Artificial Chromosomes", available on the world wide web at: <a href="http://chromos.com/feb399.html">chromos.com/feb399.html</a>
DS	AT	1999 Press Release, "Chromos Molecular Systems Reports <i>In Vitro</i> and <i>In Vivo</i> Stability of Functional Mammalian Artificial Chromosome", available on the world wide web at: <a href="http://chromos.com/march1899.html">chromos.com/march1899.html</a>
DS	AU	2001 Press Release, "Chromos Presents New Chromosome-Based Platform Technology for Gene Therapy (ASGT)", available on the world wide web at: <a href="http://chromos.com/June%204.html">chromos.com/June%204.html</a>
DS	AV	2001 Press Release, "Chromos Announces Publication of Rapid Screening Technique in the Journal Cytometry", available on the world wide web at: <a href="http://chromos.com/June%207.html">chromos.com/June%207.html</a>
DS	AW	2001 Press Release, "Chromos Initiates Research into Plant Artificial Chromosomes", available on the world wide web at: <a href="http://chromos.com/Jan23.html">chromos.com/Jan23.html</a>
DS	AX	2001 Press Release, "Chromos Announces Expression of Therapeutic Protein in Transgenic Animal Carrying an Artificial Chromosome", available on the world wide web at: <a href="http://chromos.com/nov8.html">chromos.com/nov8.html</a>
DS	AY	2001 Press Release, "Chromos Reports Data on Transgenic Animals Carrying Artificial Chromosome", available on the world wide web at: <a href="http://chromos.com/march28.html">chromos.com/march28.html</a>
DS	AZ	2001 Press Release, "Chromos and Biological Research Center Announce Publication of Human Artificial Chromosome Methodology in the Journal of Cell Science", available on the world wide web at: <a href="http://chromos.com/sept12.html">chromos.com/sept12.html</a>
DS	BA	2002 Press Release, "Chromos Announces Agreement With Lonza Biologics PLC: ACE System to be Evaluated by Leading Contract Protein Manufacturer" Burnaby, BC, Canada, available on the world wide web at: <a href="http://chromos.com/june10.html">chromos.com/june10.html</a> (09/12/02)
DS	BB	2002 Press Release, "Chromos Reports Progress in Gene Delivery To Adult Derived Stem Cells" Burnaby, BC, Canada, available on the world wide web at: <a href="http://chromos.com/june6.html">chromos.com/june6.html</a> (09/12/02)
DS	BC	2002 Press Release, "Chromos Enters Collaboration Agreement with Morphogen Pharmaceuticals" Burnaby, BC, Canada, available on the world wide web at: <a href="http://chromos.com/april24.html">chromos.com/april24.html</a> (09/12/02)
duplicate		
	BD	Alton <i>et al.</i> , "Nucleotide sequence analysis of the chloramphenicol resistance transposon <i>Tn9</i> ", <i>Nature</i> , <b>282</b> :864-869 (1979)

EXAMINER

David Jambert

DATE CONSIDERED

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Title: METHODS FOR DELIVERING NUCLEIC ACID MOLECULES INTO CELLS AND ASSESSMENT THEREOF

Sheet 4 of 10

FORM PTO-1449 (Modified)	ATTY. DOCKET NO. 24801-416C	SERIAL NO. 10/086,745
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT De Jong <i>et al.</i>	
	FILING DATE February 28, 2002	GROUP 1836

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BE	Alvaro-Garcia <i>et al.</i> , "Cytokines in Chronic Inflammatory Arthritis. V. Mutual Antagonism between Interferon Gamma and Tumor Necrosis Factor-Alpha on HLA-DR Expression, Proliferation, Collagenase Production, and Granulocyte Macrophage Colony-stimulating Factor Production by Rheumatoid Arthritis Synoviocytes", 86:1790-1798 (1990)
BF	Anderson <i>et al.</i> , "Flow Cytometry of Mitotic Cells", <i>Experimental Cell Res.</i> 238:498-502 (1998)
BG	ATCC (American Type Culture Collection) Number CCL-29
BH	ATCC (American Type Culture Collection) Number CCL-1.3
BI	ATCC (American Type Culture Collection) Number CCL-110
BJ	ATCC (American Type Culture Collection) Number CRL-1573
BK	ATCC (American Type Culture Collection) Number CCL-1.4
BL	ATCC (American Type Culture Collection) Number CRL-2056
BM	ATCC (American Type Culture Collection) Number CRL-1769
BN	Audouy <i>et al.</i> , "Serum as a modulator of lipoplex-mediated gene transfection: dependence of amphiphile, cell type and complex stability", <i>J. Gene Med.</i> 2:465-478 (2000)
BO	Audouy and Hoekstra, "Cationic lipid-mediated transfection <i>in vitro</i> and <i>in vivo</i> (Review)", <i>Molecular Membrane Biology</i> , 18:129-143 (2001)
BP	Aupperle <i>et al.</i> , "NF- $\kappa$ B Regulation by I $\kappa$ B Kinase in Primary Fibroblast-Like Synoviocytes", <i>The Journal of Immunology</i> , 163:427-433 (1999)
BQ	Baldwin <i>et al.</i> , "Cloning of the Luciferase Structural Genes from <i>Vibrio harvey</i> and Expression of Bioluminescence in <i>Escherichia coli</i> ", <i>Biochem.</i> , 23:3663-3667 (1984)
BR	Bao <i>et al.</i> , "Transfection Of A Reporter Plasmid Into Cultured Cells By Sonoporation <i>In Vitro</i> ", <i>Ultrasound in Med. &amp; Biol.</i> , 23/8:953-959 (1997)
BS	Basic Protocol, Book: <i>Current Protocols in Molecular Biology</i> , Supplement 14, "Calcium Phosphate Transfection", Section 1, Unit 9.1.1 - 9.1.9 (1990)
BT	Bendale <i>et al.</i> , "Efficacy of Sustained Blood Levels of Interleukin-1 Receptor Antagonist in Animal Models of Arthritis", <i>Arthritis and Rheumatism</i> , 42(3):498-506 (1999)
BU	Caldwell <i>et al.</i> , "Activation of Genes with Ultrasound," <i>Ultrasound Contrast Research Symposium</i> San Diego, CA, February, 6-8, 1998

EXAMINER

David Lambertson

DATE CONSIDERED

6/17/04

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Title: **METHODS FOR DELIVERING NUCLEIC ACID MOLECULES INTO CELLS AND ASSESSMENT THEREOF**

Sheet 5 of 10

FORM PTO-1449 (Modified)

ATTY. DOCKET NO.  
24601-418CSERIAL NO.  
10/086,745.LIST OF PATENTS AND PUBLICATIONS FOR  
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STATEMENTAPPLICANT  
De Jong *et al.*FILING DATE  
February 28, 2002GROUP  
1636

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BV	Co <i>et al.</i> , "Generation of transgenic mice and germline transmission of a mammalian artificial chromosome introduced into embryos by pronuclear microinjection", <i>Chromosome Res.</i> , 8:183-191 (2000)
BW	Corrigall <i>et al.</i> , "Functional IL-2 Receptor $\beta$ (CD122) and $\gamma$ (CD132) Chains Are Expressed by Fibroblast-Like Synovocytes; Activation by IL-2 Stimulates Monocyte Chemoattractant Protein-1 Production", <i>The Journal of Immunology</i> , 166:4141-4147 (2001)
BX	Csonka <i>et al.</i> , "Novel generation of human satellite DNA-based artificial chromosomes in mammalian cells", <i>J. of Cell Sci.</i> , 113:3207-3216 (2000)
BY	de Wet <i>et al.</i> , "Firefly Luciferase Gene: Structure and Expression in Mammalian Cells", <i>Molecular and Cellular Biol.</i> , 7:725-737 (1987)
BZ	de Jong <i>et al.</i> , "Efficient <i>in-vitro</i> transfer of a 60-Mb mammalian artificial chromosome into murine and hamster cells using cationic lipids and dendrimers", <i>Chromosome Res.</i> , 9(6):475-485 (2001)
CA	de Jong <i>et al.</i> , "Mammalian Artificial Chromosome Pilot Production Facility: Large-Scale Isolation of Functional Satellite DNA-Based Artificial Chromosomes", <i>Cytometry</i> , 35:129-133 (1999)
CB	de Jong <i>et al.</i> , Abstract No. 550: "In Vitro Transfer of a 60 Mb Mammalian Artificial Chromosome into Primary Cell Lines Using Cationic Lipids and a Dendrimer", one page
CC	de Jonge <i>et al.</i> , "Chromosome and DNA-Mediated Gene Transfer in Cultured Mammalian Cells", <i>International Review of Cytology</i> , 92:133-158 (1984)
CD	Del Vecchio <i>et al.</i> , "Approaches to enhancing the retroviral transduction of human synovocytes", <i>Arthritis Research</i> , 3:259-263 (2001)
CE	Durand <i>et al.</i> , "Sequencing Radiation and Adriamycin Exposures in Spheroids to Maximize Therapeutic Gain", <i>J. J. Radiation Oncol. Biol. Phys.</i> , 17:345-350 (1989)
CF	Durand <i>et al.</i> , "Response of Cell Subpopulations in Spheroids to Radiation-Drug Combinations", <i>NCI Monogr.</i> , 6:95-100 (1988)
CG	Durand <i>et al.</i> , "Schedule Dependence for Cisplatin and Etoposide Multifraction Treatments of Spheroids", <i>J. Natl. Cancer Inst.</i> , 82/23:1841-1845 (1990)
CH	ECACC (European Collection of Cell Cultures) No: 85110503, Cell Line Name: NS0, mouse myeloma
CI	Edwards, J.C.W., "Fibroblast biology: Development and differentiation of synovial fibroblasts in arthritis", <i>Arthritis Research</i> , 2(5):344-347 (2000)

EXAMINER

David Lambert

DATE CONSIDERED

6/17/04

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Title: METHODS FOR DELIVERING NUCLEIC ACID MOLECULES INTO CELLS AND ASSESSMENT THEREOF

Sheet 6 of 10

FORM PTO-1449 (Modified)

ATTY. DOCKET NO.  
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APPLICANT'S INFORMATION DISCLOSURE  
STATEMENTAPPLICANT  
De Jong *et al.*FILING DATE  
February 28, 2002GROUP  
1638

## OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

CJ	Edwards, J.C.W., "Synovial Intimal fibroblasts," <i>Ann. Rheum. Dis.</i> , <b>54</b> :395-397 (1995)
CK	Engbrecht <i>et al.</i> , "Identification of genes and gene products necessary for bacterial bioluminescence", <i>Proc. Natl. Acad. Sci. USA</i> , <b>81</b> :4154-4158 (1984)
CL	Evans <i>et al.</i> , "Clinical Trial to Assess the Safety, Feasibility, and Efficacy of Transferring a Potentially Anti-Arthritic Cytokine Gene to Human Joints with Rheumatoid Arthritis," <i>Human Gen. Ther.</i> , <b>7</b> :1261-1280 (1998)
CM	Firestein, G.S., "Invasive Fibroblast-Like Synoviocytes in Rheumatoid Arthritis," <i>Arthritis Rheum.</i> , <b>39</b> :1781-1790 (1996)
CN	Fritz <i>et al.</i> , Abstract: "Ultrasound Enhancement of Gene Expression, Newly Discovered Cationic Lipids, and a New Class of Gene Delivery Agents", InaRx Pharmaceutical Corp. Announces Important Discoveries in Emerging Field of Drug Delivery Using Acoustically Active Carriers, InaRx Pharmaceutical Corp., pages 1-2 (2001)
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Title: **METHODS FOR DELIVERING NUCLEIC ACID MOLECULES INTO CELLS AND ASSESSMENT THEREOF**

Sheet 7 of 10

FORM PTO-1449 (Modified)	ATTY. DOCKET NO. 24601-416C	SERIAL NO. 10/086,745
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT	APPLICANT De Jong <i>et al.</i>	
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Title: METHODS FOR DELIVERING NUCLEIC ACID MOLECULES INTO CELLS AND ASSESSMENT THEREOF



Sheet 8 of 10

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Sheet 9 of 10

FORM PTO-1449 (Modified)

ARTICLE DOCKET NO.  
2-600-416CSERIAL NO.  
10/088,745LIST OF PATENTS AND PUBLICATIONS FOR  
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duplicates

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EN	Unger <i>et al.</i> , Abstract: "Ultrasound Mediated Drug Delivery with Acoustically Active Carriers and SonoPoration™ and FluoroGene™ Gene Delivery", <i>ImaRx Pharmaceutical Corp.</i> , pages 1-8 (2000)
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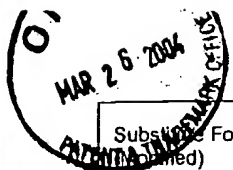
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Substitute Form PTO-1449 (Patent-Related)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 24601-416C (17084-018003)	Application No. 10/086,745
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))		Applicant Gary De Jong, et al.	
		Filing Date February 28, 2002	Group Art Unit 1636

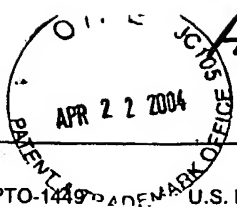
U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
		NONE					

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
		NONE						

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
DJ	AA	Sheila T. Compton, <i>et al.</i> , "An improved method for routine preparation of intact artificial chromosome DNA (340-1000 kb) for transfection into human cells," <i>Nucleic Acids Research</i> 27 (7):1762-1765 (1999)
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Examiner Signature <i>David Lambertson</i>	Date Considered 6/17/04
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Substitute Form PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office		F&R No. 17084-018003 Attorney's Docket No. 24601-416C		Application No. 10/086,745	
List of Patents and Publications for Applicant's Information Disclosure Statement (37 CFR §1.98(b))				Applicant Gary De Jong, et al.			
				Filing Date February 28, 2002		Group Art Unit 1636	
<b>U.S. Patent Documents</b>							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
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<b>Foreign Patent Documents or Published Foreign Patent Applications</b>								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
		NONE						

<b>Other Documents (include Author, Title, Date, and Place of Publication)</b>		
Examiner Initial	Desig. ID	Document
DS	*AA	Ohse, et al., "A New and Efficient Method for Gene Transfer into Mouse FM3A Cells Using Metaphase Chromosomes by Electroporation," <i>Biosci. Biotech Biochem.</i> , 60 (11):1879-1811 (1996)
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